

## ABSTRACT OF THE DISCLOSURE

Methods and systems for automatic adjustment of the transmit power are provided. Excess transmit power is determined as a function of the difference between a noise level and the lower end of the dynamic range of the system as configured. Based on the excess transmit power, the transmit power is reduced from the regulated maximum default settings to about a minimum while substantially preserving the original display image. This minimizes the acoustic energy delivered to the transducer and the body, thus reducing transducer heating and satisfying the FDA's ALARA principle.